

A close-up, profile shot of a Black woman with long braids looking towards a young Black child. The child is wearing a white shirt with black polka dots and a headband with pink and blue bows. The woman is smiling slightly. The background is blurred.

# Comprehensive Housing Interventions: A New Way Forward for Healthy & Efficient Communities



# What we will cover today

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Introducing GHHI

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The GHHI Model

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Lead Hazard Control & Healthy  
Housing Needs

5

Research & Policy

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Best Practices in Maryland

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National Lead Campaign



# The Burden of Unhealthy and Energy Inefficient Homes

30M families live in unhealthy homes



Homes with environmental hazards are making their residents sick

14.4M missed days of school each year



Asthma is the top reason students miss school

14.2M missed days of work each year



Collateral burden of sick children is missed days of work for parents and caretakers

\$81B+ spent on asthma



\$31B+ spent on slip & fall injuries



\$50.9B+ spent on lead poisoning



Over \$100B in taxpayer funding is spent each year to address the impact of these hazards

Low income families spend 20% of monthly income on energy costs



VS.

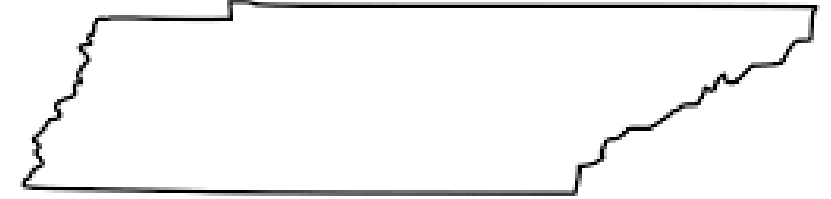
3.5% in other households



# Tennessee Environmental Health & Energy Cost Burdens

## Housing & Affordability

- Total Population: 6.5 million
  - Total Housing Units: 2.9 million
  - Renter Households: 850,000 (36% cost burdened)
- (2016, US Census American Community Survey 5 Year Estimates)



## Health

- Over 448,000 people with asthma (2014, TN Department of Health)
- Over 1,000 children under 18 with measured EBLL (2015, TN Department of Health)
- Injury is the leading cause of death among children and young adults (falls, poisonings, and firearm accidents are among leading causes)
- Injuries lead to 90,000 years of potential life lost
- 5,105 fatal injuries, 37,000 hospitalizations, 745,475 emergency department visits (2014, TN Department of Health)



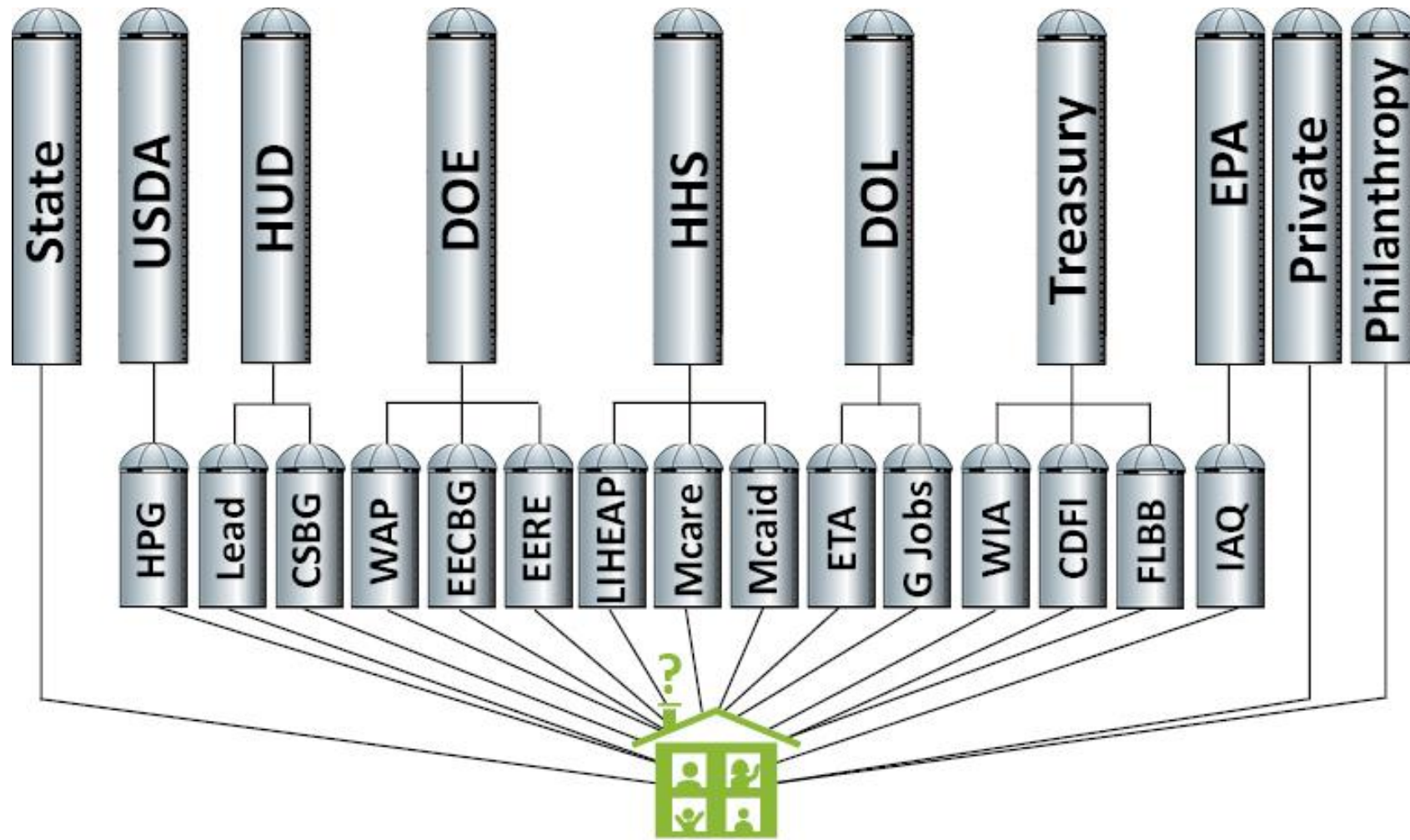
## Energy

- Households with incomes below 50% of Federal Poverty Level pay 27% of income on energy bills
  - Memphis has highest energy burden of the top 50 U.S. metro areas (13% of monthly costs for low income households)
- (2016, American Council for an Energy Efficient Economy)





# A Fractured Delivery System





# Developing Local & State Responses

Comprehensive Approach to Healthy Housing & Efficiency	Cross-Sector Coordination	Strategic Planning & Action
<ul style="list-style-type: none"><li>• Lead poisoning prevention</li><li>• Asthma control</li><li>• Injury prevention</li><li>• Weatherization &amp; Efficiency</li></ul>	<ul style="list-style-type: none"><li>• Public health</li><li>• Local &amp; state government</li><li>• Federal partners</li><li>• Private sector</li><li>• Non-government organizations</li></ul>	<ul style="list-style-type: none"><li>• Partnership development</li><li>• Policy adoption</li><li>• Regulatory enforcement</li><li>• Data collection</li><li>• Assessments and outcome measurement</li></ul>



**Green & Healthy  
Homes Initiative®**



## Lead Poisoning Prevention to the GHHI Model: The Maryland Story

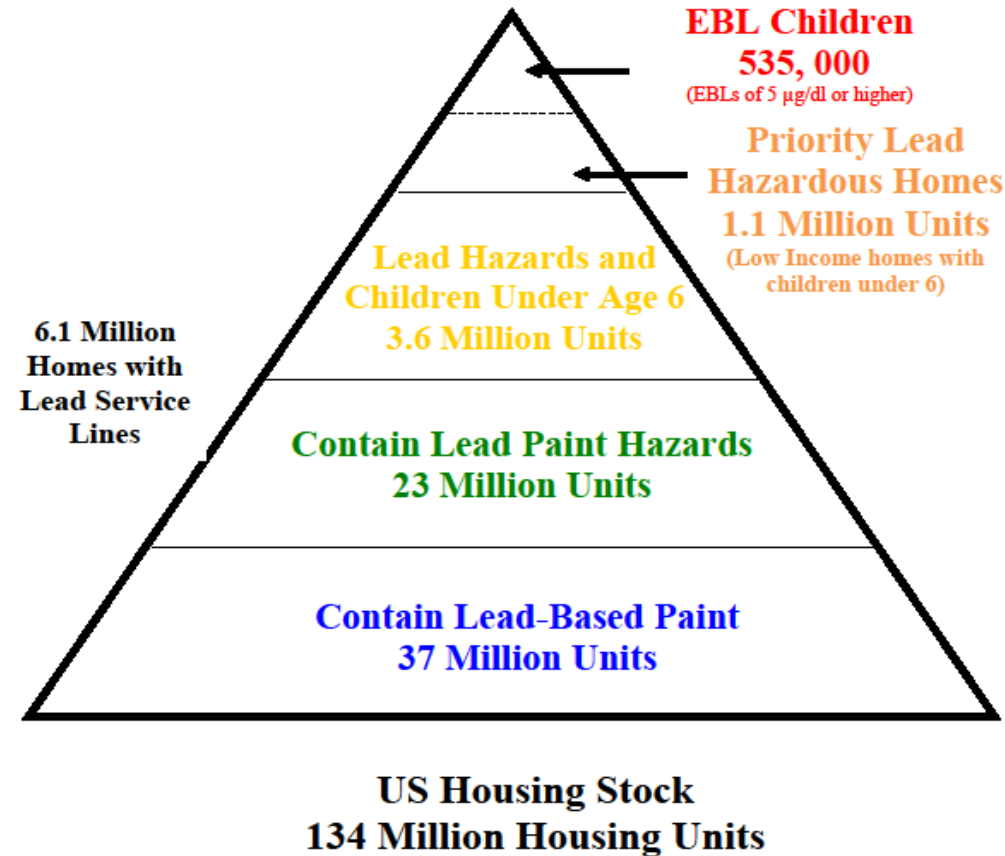




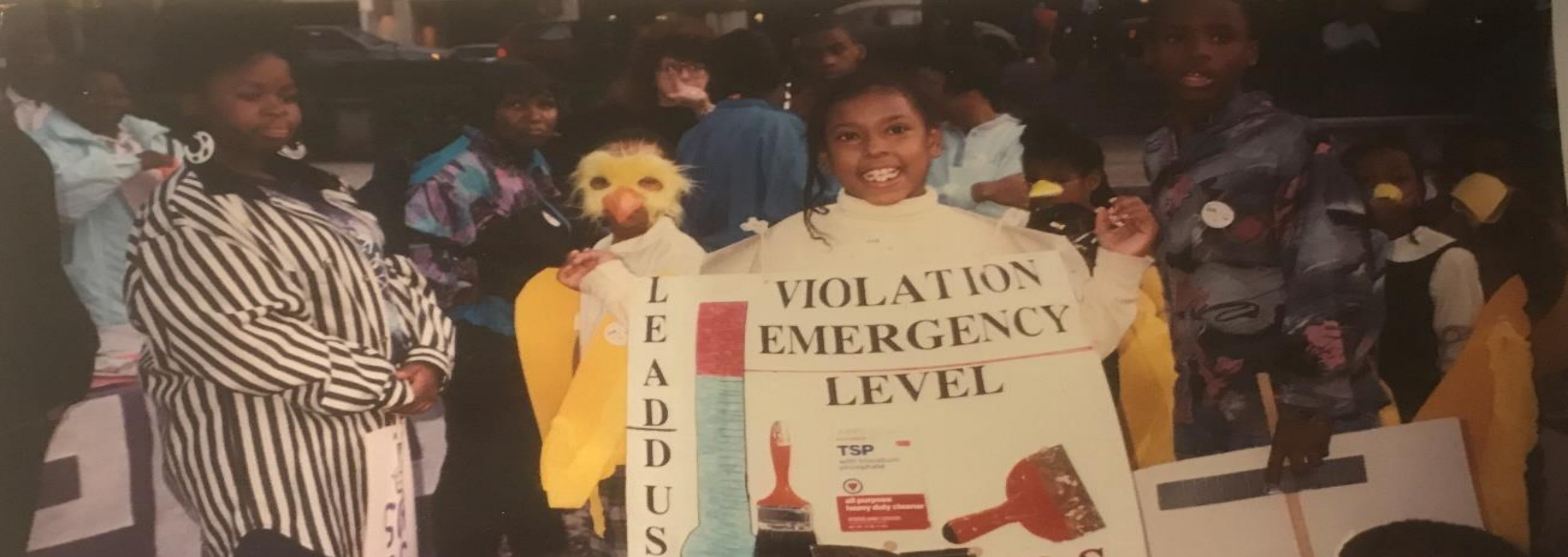
# Persistence of Lead Poisoning

## Recommitting to the Lead Poisoning Elimination Cause

### National Lead Safe Housing Pyramid







# THE SUN

*"The War on Lead Poisoning  
Seems Destined to Fail"*

*- February 4, 1991*



# In 1993, over HALF of Baltimore City's children annually had elevated blood lead levels



Census Tract	Percentage of children tested and found to have elevated blood lead levels (10 ug/dl or higher)
806-Broadway/ East Oliver	<b>82.23%</b>
807-Broadway/ East Oliver	<b>70.89%</b>
808-Middle East	<b>65.15%</b>





# Model Legislation

## Maryland Reduction of Lead Risk in Housing Law

(Environmental Article § 6-801-852)

- **Passed first law in the nation in 1994** requiring mandatory, proactive rental inspections (PRI) and remediation of lead hazards
- Required now for all pre-1978 rental properties in Maryland





# Model Legislation

## Maryland Lead Law Requirements

- Register property with Maryland Department of the Environment (MDE) and pay \$30.00 annual fee per unit;
- Requires Lead Risk Reduction Inspection Certification **prior** to occupancy **or** within 30 days in response to a Notice of Defect/EBL to verify that there is no chipping, peeling paint and the property passes lead dust clearance inspection;
- Provide tenants with a copy of lead informational pamphlets (“Notice of Tenant’s Rights” and “Protect Your Family From Lead in Your Home”) and the Lead Risk Reduction Certificate for the property at the time of occupancy.



**Maryland**  
Department of  
the Environment



# Public Enforcement

## Using Effective Enforcement as a Prevention Tool

- Instituted heavy fines and strong enforcement for non-compliance with the Maryland Reduction of Lead Risk in Housing Law
- Maryland Department of the Environment (MDE) issues 400-800 notices of violation annually in Maryland
- MDE pursues enforcement against an owner's entire non-compliant portfolio of rental units
- 4-5 Attorneys General at MDE are assigned full-time to pursue enforcement actions against non-compliant rental units
- Strong enforcement is not only effective but having viable enforcement has a deterrent effect on some property owners who would otherwise not comply or invest in their units



KEY PARTNER:

**Maryland**  
Department of  
the Environment



# Private Sector Enforcement

## Strengthening Maryland's Lead Poisoning Prevention Legislation

- Established **Rent Escrow** right in 1998 for tenants for the repair of lead hazards in their non-compliant property
- In 2004, passed **Clean Hands Bill** legislation denying access to rent court for owners who are out of compliance with Maryland's lead law
- In 2008, passed **Relocation Assistance** legislation requiring owners of non-compliant properties to pay up to \$2,500 to assist in relocating tenants from their hazardous property to lead certified housing





# Policy, Legislation & Enforcement

## More Best Practices for Prevention

- Established Nation's First Housing Choice Voucher Program for lead affected families (250 vouchers with preference for lead affected families)
- Created CDBG funded Housing Relocation Assistance Fund to assist families in relocating from hazardous housing to lead safer housing (\$10,000 annually)
- GHHI secured 2 HUD LEAP and 4 HUD Healthy Homes Demonstration/Production Grants totaling \$7.7 million to provide interventions in over 1,800 low income homes in Baltimore City
- Lead Dust - Requiring lead dust clearance testing at rental turnovers and for EPA RRP work
- Lead Safe Demolition - Adoption of lead safe demolition standards in 2007 in Baltimore City to prevent hazardous emissions
- Lead in Products - One of the first states to pass legislation banning lead in products in 2008



# Blood Lead Testing

## Screening as a Means of Prevention

- 1997 – legislation passed to require lead screening of children prior to entrance to school, child care or day care
- 2016 – Universal Blood Lead Testing in Maryland

We are still advocating to lower the threshold from 10 to 5 µg/dL for **mandatory environmental investigation and medical case management** for rental and owner-occupied properties

### 10 to 5 so Kids Can Thrive

#### Did You Know?

- ▶ The CDC has declared there is no “safe” level of lead in the body.
- ▶ In 2016, 2,084 children in MD had an EBL. 83% of those children were between the levels of 5-9 µg/dL.
- ▶ Even low level exposure to lead can cause irreversible brain damage.
- ▶ Research shows that some of the most severe effects of lead poisoning occurs at levels below 5 µg/dL.
- ▶ Prevention of lead is recommended at all levels.

\*Maryland Department of the Environment. (July 2017). 2016 Annual Report of Childhood Blood Lead Surveillance in Maryland. Retrieved from: <http://mde.maryland.gov/programs/LAND/LeadPoisoningPrevention/Pages/healthcare.aspx>. Page 7

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Maryland has

# \*1,729

Children aged 0-5 with blood levels between 5-9 µg/dL



#### How does Maryland compare with other states?



- States with an action level ≥ 5 µg/dL for medical case management and environmental investigation
- States with an action level ≥ 5 µg/dL for medical case management

*A flyer used by GHHI in Maryland's 2018 legislative session*

# Other Sources of Lead Poisoning

## Water & Soil

### Making School Drinking Water Safe

#### **Baltimore City Schools**

- Instituted Bottled Water Program
- New filtration systems being installed

#### **Maryland Schools**

- Passed legislation to test all pre-1978 schools for lead in paint and water
- Passed legislation requiring parental notification of testing results

### Lead-Safe Demolition Standards

#### **Lead Safe Demolition**

Adoption of lead safe demolition standards in 2007 in Baltimore City to prevent hazardous emissions

#### **Lead Dust**

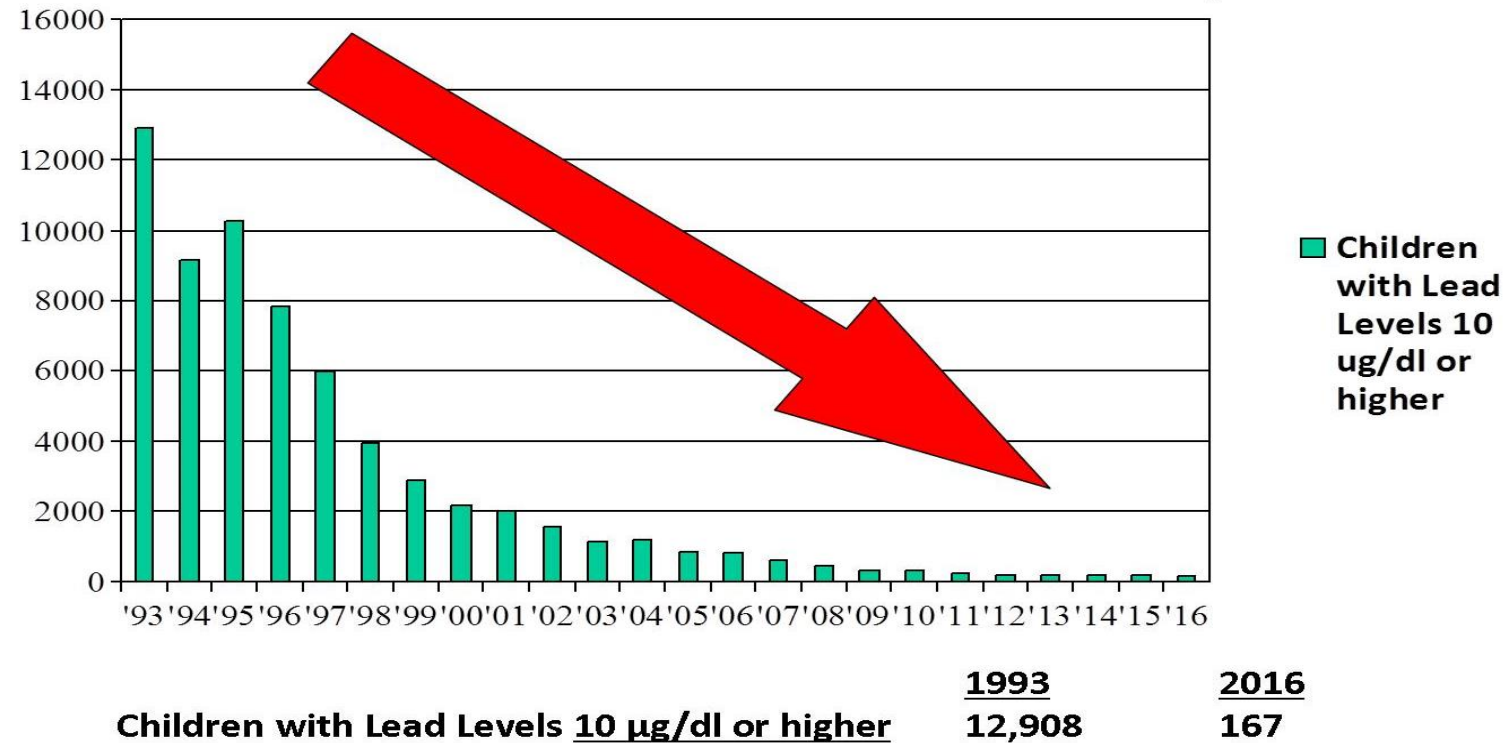
Require lead dust clearance testing at rental turnovers and for EPA Renovation, Repair and Painting Program work



# Producing Measurable Outcomes

## 99% Decline in Childhood Lead Poisoning in Baltimore City

### Dramatic Decline in Lead Poisoned Children in Baltimore City



Source: MDE 2016 Annual Lead Report



# The GHHI Model

## Groundbreaking Direct Service Prevention Programs

- In 1997, GHHI created one of the nation's first **Healthy Homes Program** providing in-home resident education and healthy homes interventions to reduce lead hazards and asthma triggers and remediate safety hazards in the homes of low income families where no programs previously existed
- **GHHI in-house crews** in Baltimore are hired from at risk communities which provides economic opportunity through full-time positions and green jobs training and career ladder
- **GHHI Family Advocate Attorneys** represent families in court throughout Maryland for the repair of lead hazards and other home-based environmental health hazards
- **GHHI Case Managers** provide resident education, lead and asthma case management, housing relocation assistance and other support services



# The GHHI Model

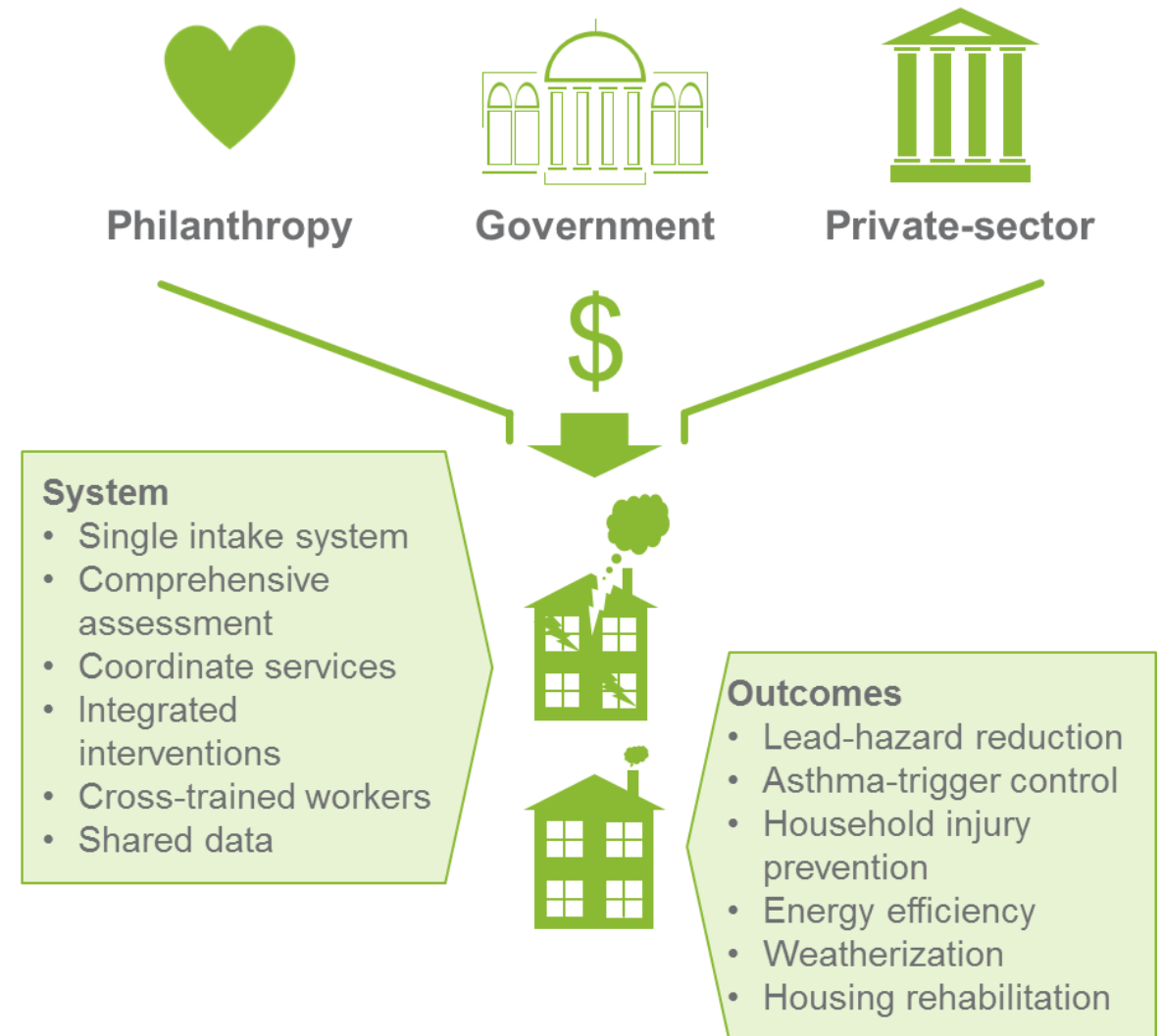
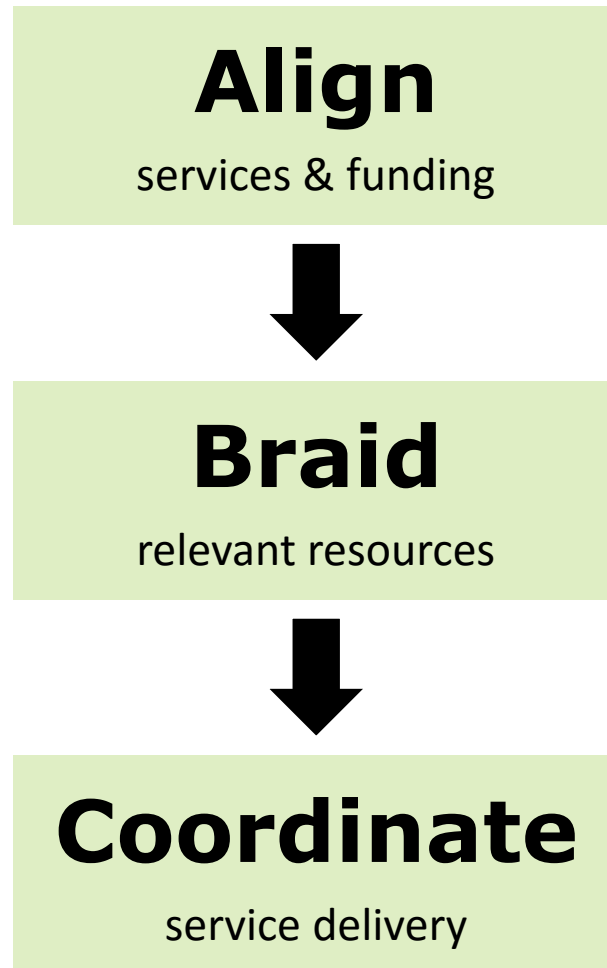
## Delivers Green & Healthy Homes Services

- GHHI's in-house crew has completed **over 4,000** lead hazard reduction, healthy homes and weatherization interventions in the homes of low income families in Maryland
- GHHI Baltimore utilizing a comprehensive housing assessment and intervention model
- **20,000** low income clients served
- GHHI believes strongly that many best practices and innovative programs are often derived from providing actual services to children, families and owners in at risk communities to learn what works in producing results and what practices can be scaled across the country

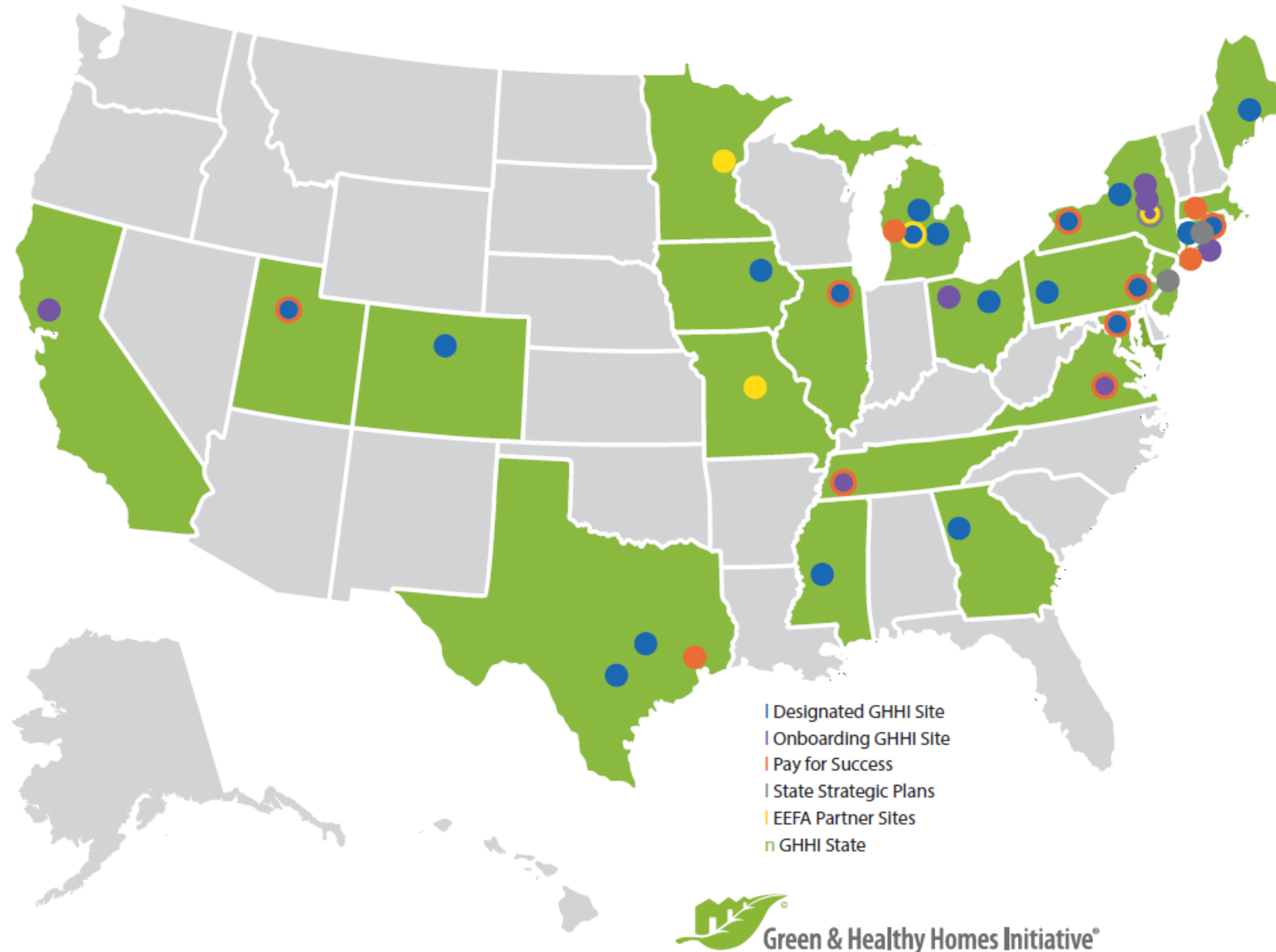
Collective Strategies Produced 98% Decline in Lead Poisoning in Maryland!

# The GHHI Model: “No Wrong Door”

## Developed from our Baltimore Work



## GHHI at Work: Building a National Movement







# Key Characteristics of the GHHI Model

**Local Learning  
Network &  
Outcome Broker**

**Single Portal  
Intake**

**Shared Data  
Platform &  
Evaluation**

**Signed GHHI  
Compact**



# Family Engagement During a GHHI Intervention

**Health & Safety  
Assessment**

**Energy Audit**

**Resident  
Education**

**Pre/Post  
Intervention  
Surveys**

## **Strategy:**

- Create a comprehensive scope of work
- Execute an coordinated intervention



# Typical In-Home Interventions

**Lead Hazards**

**Home Rehab/  
Healthy Homes**

**Independent  
Living Upgrades**

**Weatherization/  
Energy Efficiency**



# The GHHI Model Producing National Results



**~600,000**  
green &  
healthy units  
in partnership  
with HUD

**Up to 25%**  
government  
cost savings

**\$4K-8K**  
increase in  
green job  
wages



# GHHI Baltimore: Family Outcomes

## Smith Family

### Pre-Intervention Situation:

- Family of four with a son who has severe asthma
- History of repeated asthma episodes resulting in hospitalizations on average of three times per year (Average stay: 1 week)
- Deteriorated, lead hazardous windows; high dust mite levels; mouse infestation; lack of venting; high VOC usage; poorly weatherized

**Costs: \$12,256 – Asthma specific costs \$1,472**

**Partners:** HUD OLHCHH (HHD), CDBG, CSBG, Maryland Energy Administration, Foundations

**Results:** Allergens & lead hazards remediated; Home weatherized

### Outcomes:

- Son was not hospitalized due to asthma triggers in the home in the 12 months post-intervention
- **Avoided medical costs of \$48,300 in first year alone**
- Annual energy cost savings of **\$721**





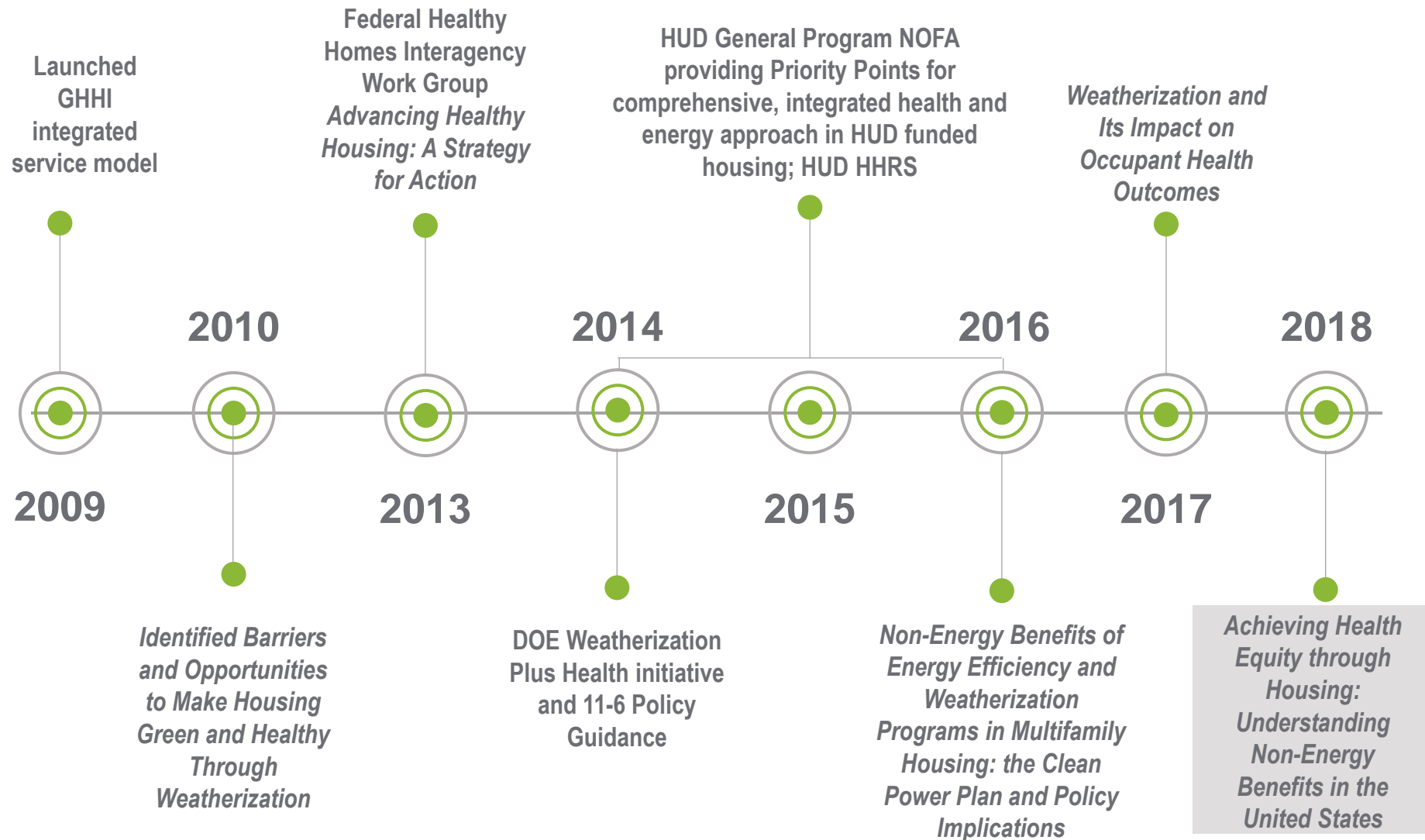
# GHHI Memphis Site Development

- Partnership with Le Bonheur Children's Hospital, Habitat for Humanity of Greater Memphis, and the Memphis Area Medical Legal Partnership to lead feasibility study to demonstrating healthcare cost savings of healthy homes interventions
- Comprehensive home intervention model with 10+ City, County, and nonprofit housing, health, and energy efficiency providers - designed to coordinate the delivery of services
- Developed a 1-page Comprehensive Intake Form, allowing Memphis residents and families to complete a single document to enter this comprehensive service delivery model





# GHHI Research & Policy Development







# Achieving Health and Social Equity through Housing:

Understanding the Impact of Non Energy Benefits in the United States



- Released February 7, 2018
- Paper is now available for [download](#)
- Sign up for the GHHI [mailing list](#) to get follow-up publications and other updates



# Organization of Findings

Findings on Individual Level Non-Energy Benefits	Non- Energy Benefits at Community and National Levels	Conclusion
<ul style="list-style-type: none"><li>• Housing Affordability</li><li>• Poor Quality Housing (hazards, health effects, and remediation methods)</li><li>• Indirect Impacts on Occupants</li><li>• Impact on Owners</li></ul>	<ul style="list-style-type: none"><li>• Community Level Non-Energy Benefits</li><li>• Sectoral Level Non-Energy Benefits (energy providers)</li><li>• National Level Non-Energy Benefits</li></ul>	<ul style="list-style-type: none"><li>• Energy Efficiency Evaluation Practices</li><li>• Opportunities for Capturing NEBs</li><li>• Policy Recommendations<ul style="list-style-type: none"><li>• Program administration</li><li>• Financing strategies</li></ul></li></ul>

# National Lead Campaign

## Activities to date

- National Lead Summit of Key Stakeholders (December 2016 in Washington, DC)
- GHHI 2016 Strategic Plan to End Childhood Lead Poisoning – A Five Year Blueprint For Action
- Inaugural Lead Poisoning Prevention Catalytic Awards



Strategic Plan to  
End Childhood Lead Poisoning

A Blueprint for Action



## Other Lead Strategic Plans

- **Pew/RWJ:** 10 Policies to Prevent and Respond to Childhood Lead Exposure
- **Find It Fund It Fix It:** A Lead Elimination Action Drive
- **Earthjustice:** Plan of Action to Prevent Childhood Lead Exposure
- **American Academy of Pediatrics:** Prevention of Childhood Lead Toxicity
- **Environmental Defense Fund:** Lead Exposure from Multiple Sources - Interventions and Risk Communication



# National Lead Campaign

## Policy Achievements to Date

- ✓ Increase the budgets for HUD's Office of Lead Hazard Control and Healthy Homes and CDC's Lead Poisoning Prevention Program
- ✓ Amend the Lead Safe Housing Rule
- ✓ States adopting 5 µg/dl action level for environmental investigation and medical case management: Illinois, Maine, Michigan, New Hampshire, New Jersey, North Carolina, Ohio and Oregon
- ✓ HUD adopted policy allowing OLHCHH lead grantees to test for lead in water and use Healthy Homes Supplemental Funds to remediate lead in water hazards that are identified
- ✓ Medicaid include lead hazard control interventions as a covered service under Medicaid/CHIP in the homes of EBL children
  - States allowing: Indiana, Maryland, Michigan, Ohio, and Rhode Island
- ✓ Increase state and local lead in water remediation resources
  - Examples: Pennsylvania, Virginia, Cities of Flint and Memphis





# A Blueprint for Action: Ending Lead Poisoning in 5 Years

## Five Other Key National Recommendations:

1. Increase federal lead hazard reduction budget to \$2.5 billion annually
2. End the sale of federally owned or insured properties containing lead hazards
3. Adopt a Lead Safe Income Tax Credit
4. Require all HUD or CDC government grantees to adopt the CDC threshold level for environmental investigation and medical case management in order to receive funding
5. Allow DOE WAP and HHS LIHEAP Programs to replace leaded windows with lead free Energy Star windows by revising the SIR to include health benefits in the calculation of the SIR



# Contact Info



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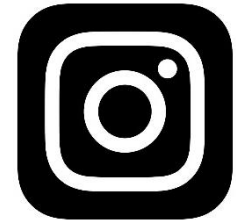
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